# Accounting Basics, Part 1

*It's 10 o'clock, do you know where your money is?*

The Income Statement, Balance Sheet and Basic Financial Analysis

**Part 3**

# What's Here…

- Introduction
- Financial Statements
- Income Statement
- Balance Sheet
- Sample Statements
- Impacting the Business
- Analyzing Financials
- Summary
- That's all…

# Introduction,
## Page 1 of 3

- This *training nugget,* picks up where Part 2 stopped.
- Part 1, started with the basics by discussing:
  - Business Types
  - Business Organization
  - Professional Advice
  - Accounting and Records
  - Accrual Accounting
  - Basic Bookkeeping
  - Chart of Accounts
  - Double-Entry Accounting
  - Debits & Credits
  - The Journal
  - The Ledger

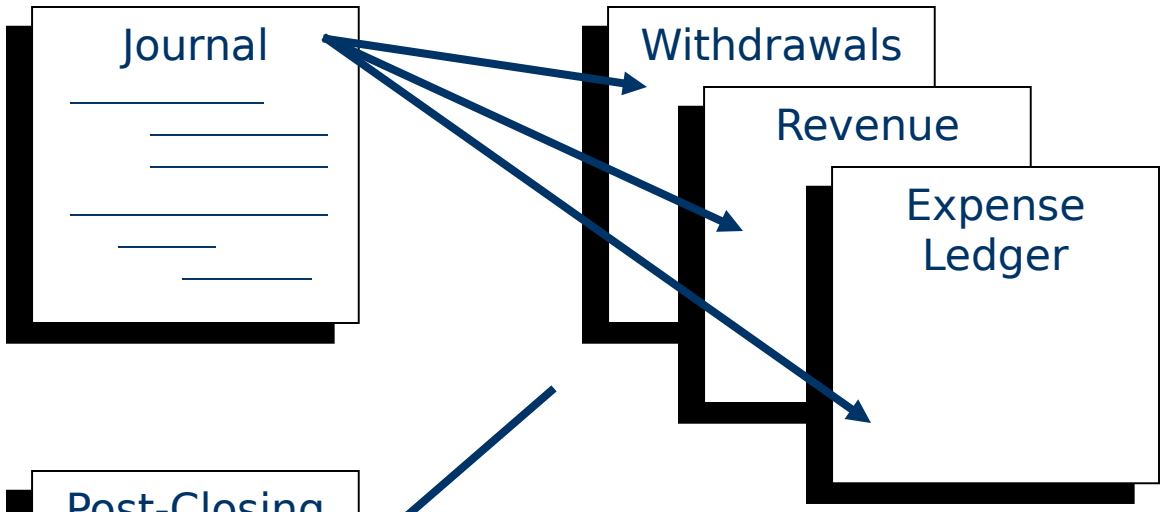
# Introduction,
## Page 2 of 3

- Part 2, illustrated and discussed:
  - The Accounting Cycle
  - Adjusting Entries
  - Closing Entries
  - Trial Balance
  - Closing Balance

# Introduction,
## Page 3 of 3

- This *training nugget* illustrates and discusses:
  - Financial Statements
  - The Income Statement
  - The Balance Sheet
  - Analyzing Financials
- Subsequent basic accounting *training nuggets* will explore accounting for Fleet and Family Readiness Programs (F&FRP), the SAP Automated Information Management System (AIMS), forecasting and budgeting, and other related subjects

# Financial Statements

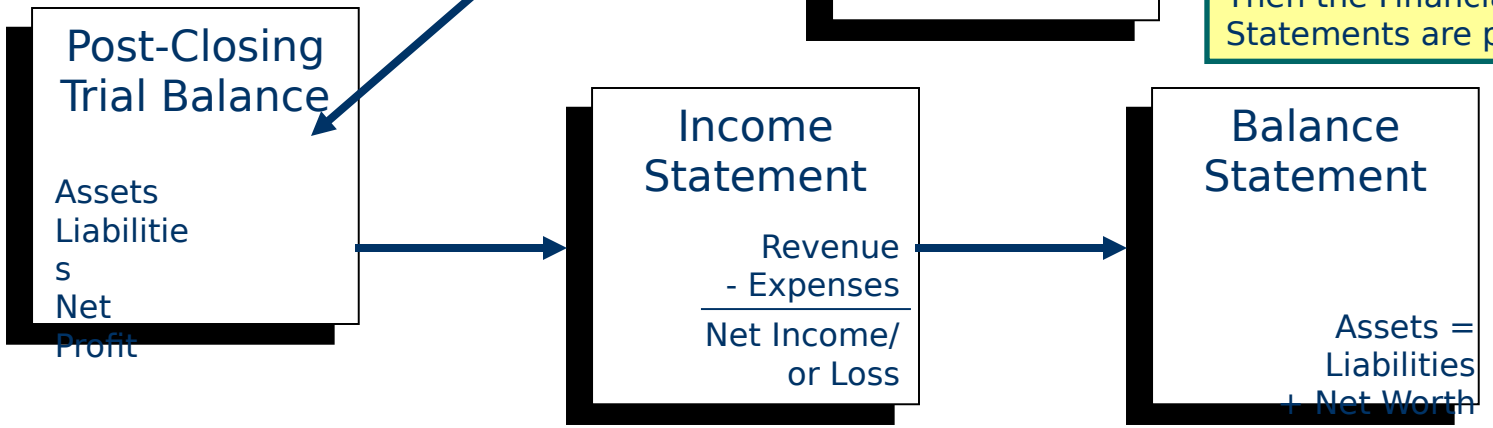



Closing entries are recorded in the Journal at the end of the accounting period.

Entries are then posted to Ledger Accounts.

Ledger accounts are then listed in the Post-Closing Trial Balance.

Then the Financial Statements are prepared.



# Income Statement,
## Page 1 of 3

- Information from the Post-Closing Trial Balance is entered in the Income Statement at the end of the accounting period:

**Income Statement**

+ Revenue

- Expenses

= Net Income
or
Loss

Earnings of the business

Costs of the business such as utility bills, insurance, wages, advertising, etc.

Net income (or loss) is moved to the Balance Sheet through the closing entries.

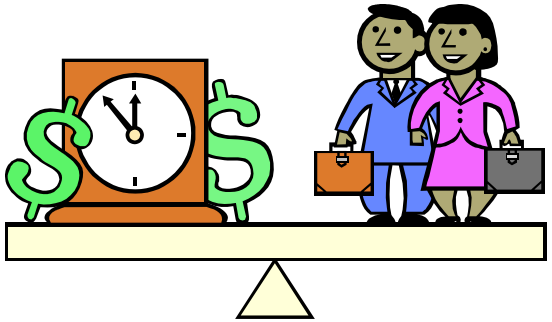
# Income Statement,
## Page 2 of 3

- The Income Statement is also known as the Operating Statement
- Composed of two account categories:
  - Income shows sales-related gross revenue
  - Expense show all costs associated with the sales such as Cost of Goods Sold and Personnel costs
- The two operating statement categories, plus to the three Balance Sheet account categories, are the main categories of accounts

# Income Statement,
## Page 3 of 3

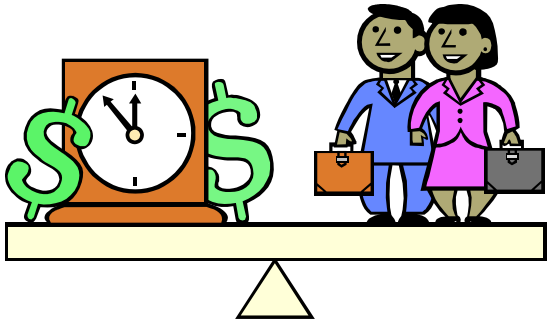
- Income (Operating) Statements cover a period of time
- Income and Expense are always recorded separately
- Both are used to record gross amounts – gross income and gross expense
- Profit or loss is not a consideration in the individual account elements – it is determined after the entries are made

# The Balance Sheet,
## Page 1 of 4



- The Balance Sheet can be prepared after the end-of-month adjustments are entered in the Journal and Ledgers and the adjusting Trial Balance prepared.
- The Balance Sheet shows what the business owns; what it owes; and its earnings (profits) or losses
- The Balance Sheet does NOT provide a clear breakdown of actual business activity

# The Balance Sheet,
## Page 2 of 4



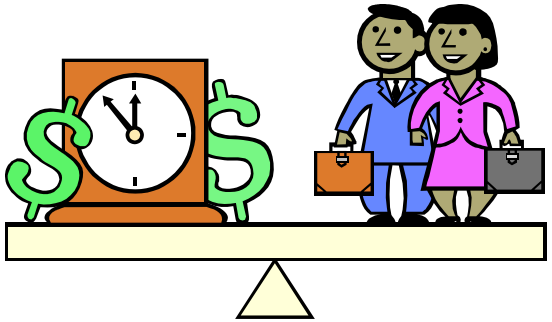
- The Adjusted Trial Balance accounts include:

Cash
Accounts Receivable
Prepaid
Office Supplies
Equipment
Accumulated Depreciation
Vehicles
Accumulated Depreciation
Land
Accounts Payable

Notes Payable
Unearned Revenue
Mortgage Payable
Capital
Withdrawals

These are the Balance Sheet Accounts

# The Balance Sheet,
## Page 3 of 4

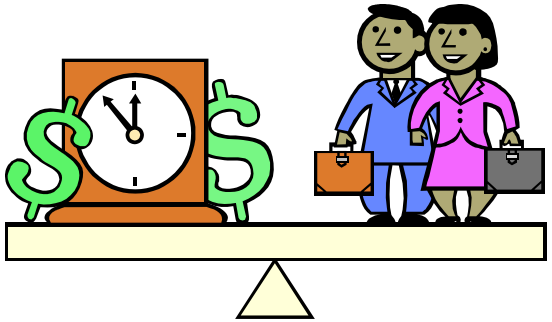


- The Adjusted Trial Balance accounts include:
  - Revenue
  - Wage Expense
  - Utilities Expense
  - Repair Expense
  - Advertising Expense

These are the Income Statement Accounts

The Income Statement Accounts are listed at the bottom of the adjusted trial balance, starting with revenue.

# The Balance Sheet,
## Page 4 of 4



**Balance Sheet Statement**

**Assets = Liabilities + Net Worth(*)**

Cash, Accounts Receivable, Equipment, Buildings, Land, etc., elements that help the business generate income

Amounts owed others

The difference between Assets and Liabilities. This is the part of the business "owned".

(*) AKA Owner's Equity

# Sample Statements

## Page 1 of 2

**Business Name**
**Income Statement**
**For the Month Ended XXX XX, 20XX**

| | | |
|---|---|---|
| **Revenue:** | | |
| Service Income | | $16,520 |
| Interest Income | | 250 |
| Total Revenue | | $16,770 |
| **Expenses:** | | |
| Rent | $ 1,500 | |
| Utilities | 900 | |
| Supplies | 4,000 | |
| Wage | 10,000 | |
| Total Expenses | | $ 16,400 |
| **NET INCOME (LOSS)** | | **$ 370** |

# Sample Statements

## Page 2 of 2

**Business Name**
**Balance Sheet**
**For the Month Ended XXX XX, 20XX**

| **ASSETS** | | **LIABILITIES** | |
|---|---|---|---|
| Cash | $ 670 | Accounts Payable | $ 500 |
| Accounts Receivable | 3,500 | Notes Payable | 1,000 |
| Supplies | 2,500 | | |
| | | **Total Liabilities** | **$ 1,500** |
| | | **NET WORTH** | |
| | | Owner Capital | $5,000 |
| | | Net Income | 370 |
| | | -Withdrawals | 200 |
| | | Owner Capital (ending) | 5,170 |
| | **$ 6,670** | | **$ 6,670** |

# Impacting the Business

- A business owner can make the business grow by:
  - Investing personal cash and assets
  - Generating revenue from operations
  - Debt (borrowing to buy for the business)
- A business owner can make a business decline by:
  - Withdrawals for personal cash or assets
  - Generating expenses from operations
  - Too much debt

# Analyzing Financials,
## Page 1 of 16

- In addition to the Balance Sheet and Income Statement, business owners / managers need to examine:
  - Cash Flow
  - Inventory
  - Cost of Good Sold
  - Profitability
  - Measures of Debt
  - Measures of Investment
  - Vertical and Horizontal Financial Statement Analysis
  - Ratios

# Analyzing Financials,
## Page 2 of 16

- Financial Analysis typically considers:
  - Items in a single year's statement
  - Comparisons for periods of time
  - Comparisons to other similar businesses
- Net Working Capital is the excess of current assets over current liabilities (from the Balance Sheet). It is indication of a business's risk or lack of.

# Analyzing Financials,
## Page 3 of 16

- A traditional method of “analyzing” financials is through relationships (ratios)
  - **Balance Sheet = $100,000**
    - Cash = $20,000
    - Accounts Receivables = $30,000
    - Fixed Assets = $50,000
  - **Ratios:**

| | **Ratio** | **Relationship** | **Percentage** |
|---|---|---|---|
| Cash: | .2 | .2:1 | 20% |
| Accounts Receivables: | .3 | .3:1 | 30% |
| Fixed Assets: | .5 | .5:1 | 50% |

# Analyzing Financials,
## Page 4 of 16

- Liquidity / Net Working Capital:
  - Indicates ability to meet financial obligations
  - More net working capital equates to less risk

| | 2006 | 2005 |
|---|---|---|
| Current Assets | 28,000.00 | 18,500.00 |
| Current Liabilities | -17,800.00 | - 6,200.00 |
| Net Working Capital | 10,500.00 | 12,300.00 |

In this example, the business is at more risk in 2006 than in 2005, Even though its assets increase by nearly $10k, its current liabilities
also increased – by $11,600!

# Analyzing Financials,
## Page 5 of 16

- Current Ratio:

**Current Ratio = Current Assets**
**Current Liabilities**

| **2006** | **2005** |
|---|---|
| 28000 | 18500 |
| = 1.57 | = 2.98 |
| 17800 | 6200 |

The current ratio is a more dependable indication of liquidity than net working capital. Comparing current year's to past year's, the larger the ratio, the lower the risk.

A ratio of 2.0 is considered acceptable for most businesses.

# Analyzing Financials,
## Page 6 of 16

- Quick Ratio:

**Current Ratio = Current Assets - Inventory**
**Current Liabilities**

| **2006** | **2005** |
|---|---|
| 28000 - 10000 | 18500 - 6800 |
| = 1.01 | = 1.88 |
| 17800 | 6200 |

Since inventory is difficult to liquidate quickly, it is subtracted from Current Assets. In this tougher test of liquidity, a ratio of 1.00 or greater is usually recommended. As you can see, the 2006 business example is very marginal. The business needs to reduce liabilities or increase assets.

# Analyzing Financials,
## Page 7 of 16

- Profitability: Gross Profit Margin

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}}$$

**2006** $\frac{2000}{8000} = 25\%$

**2005** $\frac{2500}{5800} = 43\%$

The gross profit margin indicates the percentage of each sales dollar remaining after the business has paid for its goods.

The higher the profit margin, the better.

This business did better in 2005 than in 2006.

# Analyzing Financials,
## Page 8 of 16

- Profitability: Operating Profit Margin

$$\text{Operating Profit Margin} = \frac{\text{Income from Operations}}{\text{Sales}}$$

**2006** $\frac{1000}{8000} = 13\%$

**2005** $\frac{1200}{5800} = 21\%$

This ratio ignores interest and taxes. It represents pure operations.

The higher the Operating Profit Margin, the better.

This business did better in 2005 than in 2006.

# Analyzing Financials,
## Page 9 of 16

- Profitability: Net Profit Margin

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Sales}}$$

**2006** $\frac{200}{8000} = 3\%$

**2005** $\frac{975}{5800} = 17\%$

The net profit margin is a measure of the business' success with respect to earnings on sales.

The higher the Net Profit Margin, the more profitable the business.

Clearly the example business is not doing well.

# Analyzing Financials,
## Page 10 of 16

Profitability Analysis:

- If the business' profit ratios are too low, you should ask:
  - Is there enough mark-up on goods? (Check gross profit margin)
  - Are operating expenses too high? (Check operating profit margin.)
  - Are interest expenses too high? (Check net profit margin.)

# Analyzing Financials,
## Page 11 of 16

- Debt Measures: Debt Ratio

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

**2006** $\frac{48800}{72900} = 70\%$

**2005** $\frac{26400}{52500} = 50\%$

This ratio indicates the amount of “other people’s money” being used to generate profit

The more indebtedness, the greater the risk of failure!

Clearly the example business is not doing well.

# Analyzing Financials,
## Page 12 of 16

- Investment Measures: Return-on-Investment

$$ROI = \frac{\text{Net Profit}}{\text{Total Assets}}$$

**2006** $\frac{200}{72900} = 0.3\%$

**2005** $\frac{975}{52500} = 2\%$

In addition to salary from the business, the owner should be earning additional money on his/her business investment.

The higher the ROI, the better.

Clearly, the ROI in this example is poor.

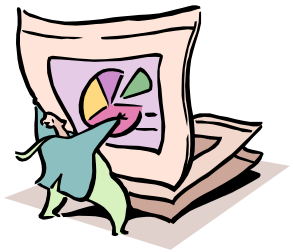
# Analyzing Financials,
## Page 13 of 16

- Vertical Analysis:
  - A percentage analysis of the current and past year's (or period's) Balance Sheets and Income Statements on a single statement
  - Balance Sheet:
    - Each Asset is shown as a percentage of total assets
    - Each liability is shown as a percentage of total liabilities and equity
  - Income Statement
    - Each element is shown as a percent of net sales.

See example income statement on next page.

**Business Name:** **Date** _____
**Comparative Income Statement**
**For Years Ended 12/31/2006 and 12/31/2005**

| | 1998 | | 1997 | |
|---|---|---|---|---|
| | Amount | Percent | Amount | Percent |
| Sales | $8,000 | 100.0% | $ 6,000 | 100.0% |
| Cost of Goods Sold | -6,000 | 75.0% | - 3,900 | 65.0% |
| Gross Profit | $ **2,000** | **25.0%** | **2,100** | **35.0%** |
| Selling (Variable) Expense | | | | |
| Advertising | $ 100 | 1.3% | $ 50 | .8% |
| Freight | 50 | .6% | 40 | .7% |
| Salaries | 150 | 1.9% | 150 | 2.5% |
| Total Selling Expense | **$ 300** | **3.8%** | **$ 240** | **4.0%** |
| Administrative (Fixed0 Expense | $ 450 | 5.6% | $ 250 | 4.2% |
| Rent | 150 | 1.9% | 125 | 2.1% |
| Insurance | 150 | 3.8% | 100 | 1.7% |
| Utilities | | | | |
| Total Administrative Expense | **$ 750** | **9.3%** | **$ 475** | **8.0%** |
| Income From Operations | **$ 950** | **11.9%** | **$ 1,385** | **23.0%** |
| Interest Income | 0 | 0.0% | 0 | 0.0% |
| Interest Expense | - 720 | 9.0% | - 450 | 7.5% |
| Net Income Before Taxes | **$ 230** | **2.9%** | **$ 935** | **51.5%** |
| Taxes | - 150 | 1.9% | - 180 | 3.0% |
| Net Profit (Loss) After Taxes | **$ 80** | **1.0%** | **$ 755** | **12.5%** |



Analyze Financials;
**Vertical Analysis:**
Example.

# Analyzing Financials,
## Page 15 of 16

- Horizontal Analysis:
  - A percentage analysis of the current and past year's (or period's) increases and decreases in the statement items shown on a single statement
  - The actual increase or decrease of an item between current and past year (period) is listed
  - The percentage increase or decrease is listed in the last (right hand) column

See example on next page.

# Analyze Financials; **Horizontal Analysis:** Example.



**Business Name:** **Date** _____
**Comparative Income Statement**
**For Years Ended 12/31/2006 and 12/31/2005**

| | 1998 | 1997 | Increase / Decrease Amount | Percent |
|---|---|---|---|---|
| Sales | $8,000 | $ 6,000 | $ 2,000 | |
| Cost of Goods Sold | 6,000 | 3,900 | -2,100 | 33.3% |
| | | | | 53.8% |
| Gross Profit | $ **2,000** | **2,100** | **($ 100)** | **(4.8%)** |
| Selling (Variable) Expense | | | | |
| Advertising | $ 100 | $ 50 | $ 50 | |
| Freight | 50 | 40 | 10 | |
| Salaries | 150 | 150 | same | 100.0% |
| | | | | 25.0% |
| | | | | same |
| Total Selling Expense | **$ 300** | **$ 240** | **$ 60** | **25.0%** |
| Administrative (Fixed0 Expense | | | | |
| Rent | $ 450 | $ 250 | $ 200 | |
| Insurance | 150 | 125 | 25 | |
| Utilities | 150 | 100 | 50 | 80.0% |
| | | | | 20.0% |
| | | | | 50.0% |
| Total Administrative Expense | **$ 750** | **$ 475** | **$ 275** | **57.9%** |
| Income From Operations | **$ 950** | **$ 1,385** | **($ 435)** | |
| Interest Income | 0 | 0 | 0 | |

# Summary, Page 1 of 3

- The financial statement is one tool to help you manage your business
- If financial results don’t meet expectations, the owner must act
  - Is the data accurate and valid?
  - What can be done to immediately cut expenses?
  - What can be done to increase productivity of assets?

# Summary, Page 2 of 3

- If return on investment is too low, what can you do to increase return from existing assets?
- If profit is too low, is mark-up adequate and competitive?  Also, are the operating expenses too high, proportionately?  And are interest costs too high … too much debt?

# Summary, Page 3 of 3

- Is liquidity low?  This runs the risk of insolvency. Examine the composition of current assets and current liabilities.
- Use the vertical and horizontal analyses to identify trends and compositions that may signify trouble.
- The Financial Basics *training nugget* will introduce basic accounting elements, unique to the Fleet and Family Readiness Program (F&FRP).

# Additional Information, Page 1 of 2

- See references, resources and definitions at end of *training nugget,* Part 1
- Basic Accounting *Training Nugget,* Part 1, covers:
  - Business Types
  - Business Organization
  - Professional Advice
  - Accounting and Records
  - Accrual Accounting
  - Basic Bookkeeping
  - Chart of Accounts
  - Double-Entry Accounting
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  - The Journal
  - The Ledger

# Additional Information,

- Basic Accounting *Training Nugget,* Part 2, covers:
  - The Accounting Cycle
  - Adjusting Entries
  - Closing Entries
  - Trial Balance
  - Closing Balance

# That’s all for now…

*Do you know where your money is?*

**Suggestions and requests to:**

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